

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
12 August 2004 (12.08.2004)

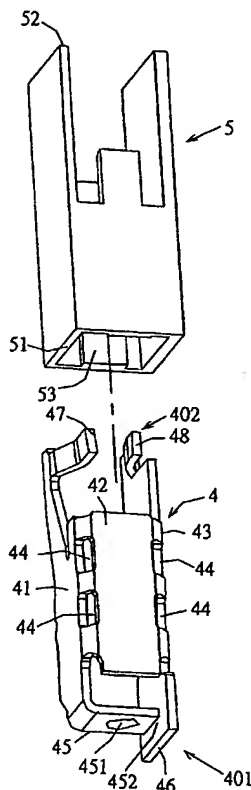
PCT

(10) International Publication Number  
**WO 2004/068641 A1**

- (51) International Patent Classification<sup>7</sup>: **H01R 4/02** 889 Yinglun Road, Waigaoqiao Free Trade Zone, Pudong, Shanghai 200131 (CN).
- (21) International Application Number: PCT/US2004/002819 (74) Agent: ZEITLER, Robert, J.; Molex Incorporated, 2222 Wellington Court, Lisle, IL 60532 (US).
- (22) International Filing Date: 29 January 2004 (29.01.2004) (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 03202281.6 29 January 2003 (29.01.2003) CN
- (71) Applicant (for all designated States except US): MOLEX INCORPORATED [US/US]; 2222 Wellington Court, Lisle, IL 60532 (US). (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): HAO, Yin [CN/CN];

[Continued on next page]

(54) Title: CONDUCTIVE TERMINAL AND THE ELECTRICAL CONNECTOR USING THE CONDUCTIVE TERMINAL



(57) Abstract: A conductive terminal and the electrical connector using the conductive terminal, the conductive terminal is received in a terminal channel defined in an insulative housing of the electrical connector which can transmit signal between an electronic component and a circuit board. The conductive terminal has a first wall, a second wall connecting with the first wall in a certain angle and a third wall connecting with the second wall in a certain angle and opposite to the first wall. The conductive terminal forms a mounting portion connecting with the solder ball. The mounting portion comprises a horizontal portion extending and bending from end of the first wall toward the third wall, and a vertical portion of the third wall and corresponding to the horizontal portion in a certain angle. The horizontal portion and the vertical portion adhere to the solder ball in two different directions so as to steadily locate the solder ball.



2004/068641 A1



GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,  
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,  
ML, MR, NE, SN, TD, TG).

— *before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments*

**Published:**

— *with international search report*

*For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.*